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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,480	08/23/2001	Kiyoshi Miyake	018656-242	8425

7590

02/07/2006

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EXAMINER

LETT, THOMAS J

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,480

Applicant(s)

MIYAKE, KIYOSHI

Examiner

Thomas J. Lett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 24 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/01.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 23 November 2005 have been fully considered but they are not persuasive. The claims as constructed differ from the previous action and are addressed by the Examiner below. Applicant states that there is no teaching in the prior art of Matsuo et al that each controller requests the printing portion to start printing "after complete image development of a received print job". On the contrary, Matsuo teaches that data is completely saved/developed in a format in disk 315 prior to printing. Each controller has programming functions using job attributes also stored in disk 315 as well as a job table (Fig. 21) to schedule queued printing. Further, the rasterization of data is also included in each print job manager (controller), (see col. 10, lines 39-45). There are also algorithms such as color matching 416 and overlay 414 to develop an image (col. 10, lines 2-15) prior to being output to the various printers of Matsuo et al.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuo et al (USPN 6,775,729 B1).

With respect to claim 1, Matsuo et al disclose an image forming apparatus (multi-functional peripheral device, 201, col. 7, lines 50 - 64) comprising:

a printing portion (laser beam printers (LBP) 103+, col. 6, line 64 - col. 7, line 16) for printing based on received print data; and

a plurality of controllers (print job managers 501+, col. 9, lines 57-58), each of said controllers comprising:

a data receiving portion (disk 315 via bus 313, col. 11, lines 22-36, Figs. 3 and 76) for receiving reception data;

an image developing portion for developing said received reception data into intermediate data (PostScript data, col. 10, lines 40-41) and for storing said intermediate data in a queue (controllers hold in the disk 315 data indicated in FIG. 42 (job queue table) representing the status of input print jobs, col. 11, lines 34-36); and

an image transmitter, for retrieving said queued intermediate data, converting the intermediate data to raster data and for transmitting said raster data to said printing portion (rasterizers 417 and 418 process document data and output image data, col. 10, lines 39-45 along with a job scheduling table, col. 21, lines 57-64).

With respect to claim 2, Matsuo et al disclose an image forming apparatus as claimed in claim 1, further comprising:

a job control portion (a job scheduling table held by all print job managers, containing a list of job IDs for each job execution priority, col. 21, lines 57-64, and see

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the job request table of FIG. 21. The job IDs are indicative of attributes for performing distinct program functions for each complete job stored in disk 315.) for receiving and storing the printing request, and instructing the printing portion to start in sequence that the job control portion receives the printing request (using a job queue table, col. 22, lines 5-19).

With respect to claim 3, Matsuo et al disclose an image forming apparatus as claimed in claim 2, wherein the job control portion informs a user who sends a print job of printing information (see the job request table of FIG. 21, and associated text @ col. 21, lines 30-56).

With respect to claim 4, Matsuo et al disclose an image forming apparatus as claimed in claim 3, wherein the printing information is a time to start printing (see the job request table of FIG. 21, and associated text @ col. 21, lines 30-56).

With respect to claim 5, Matsuo et al disclose an image forming apparatus as claimed in claim 3, wherein the printing information is a time to finish printing (see the job request table of FIG. 21, and associated text @ col. 21, lines 30-56).

With respect to claim 6, Matsuo et al disclose an image forming apparatus as claimed in claim 1, further comprising:

a selector for selecting a way of requesting the printing portion to start printing between after complete image development of a received print job and after complete image development of one page of a received print job (the print job manager 513 has the function of interrupting at least one of the print jobs being provided to the print controllers and executed by the print job managers, so as to execute a job before the

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print job that is being interrupted. In the event that job is being executed and then is interrupted, the execution thereof is preferably interrupted at a good stopping place (e.g., at the point of discharging a page) that the print engine can provide, col. 11, lines 40-48).

With respect to claim 7, Matsuo et al disclose a control method for controlling an image forming system having a plurality of controllers which generate print data by image development of received print job, and transmit the generated print data to a printing portion, the control method comprising the steps of:

each controller issuing a print request (a job scheduling table held by all print job managers, containing a list of job IDs for each job execution priority, col. 21, lines 57-64) to the printing portion after complete development of a received print job data into intermediate data;

storing each print request sequentially (a job scheduling table held by all print job managers, containing a list of job IDs for each job execution priority, col. 21, lines 57-64);

converting the intermediate data (PostScript data, col. 10, lines 40-41) into raster data (rasterizers 417 and 418 process document data and output image data, col. 10, lines 39-45); and

transmitting (rasterizers 417 and 418 output image data, col. 10, lines 39-45) the raster data to the printing portion in the stored print request sequence (a job scheduling table held by all print job managers, containing a list of job IDs for each job execution priority, col. 21, lines 57-64).

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With respect to claim 8, Matsuo et al disclose an image data processing method comprising the steps of:

receiving a print job (disk 315 via bus 313, col. 11, lines 22-36);

developing the print job and generating intermediate print data (PostScript data, col. 10, lines 40-41); and

requesting a printing portion to start printing after completion of the development of the received print job into said intermediate data (rasterizers 417 and 418 process document data and output image data, col. 10, lines 39-45 and the print job is performed in the sequence of the job queue table of Fig. 42 unless the job is interrupted or given a new priority).

Claim 9, a program product on a computer readable medium, is rejected for the same reason as claim 8. Examiner notes that programs executing the method of claim 8 are stored in disk 315.

With respect to claim 10, Matsuo et al disclose an image forming apparatus of claim 1, wherein said image transmitter (a job scheduling table, col. 21, lines 57-64 can use the job IDs to schedule output of jobs to print peripherals) sends said print data to said printing portion only after verifying that all of the job conditions for said print job are satisfied by said printing portion and that no other controller (job scheduling table, col. 21, lines 57-64 dynamically prints according to the state of jobs being provided) is currently using said printing portion.

With respect to claim 11, Matsuo et al disclose an image forming apparatus of claim 10, wherein said intermediate data is transformed into rasterized image data

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(rasterizers 417 and 418 process PostScript document data and output image data, col. 10, lines 39-45) after said image transmitting portion has determined that said print job can be send to said printing portion.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJL



MARK WALLERSON
PRIMARY EXAMINER

